

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
17 February 2005 (17.02.2005)

PCT

(10) International Publication Number  
WO 2005/013691 A1

(51) International Patent Classification<sup>7</sup>: A01N 1/02, A61K 31/416, 31/69, 45/06, A61P 7/04, 9/04, 9/10, 9/12, 11/00, 29/00, 31/00, 35/00, 41/00

(74) Agents: PAGET, Hugh et al.; Mewburn Ellis LLP, York House, 23 Kingsway, London Greater London WC2B 6HP (GB).

(21) International Application Number: PCT/GB2004/003365

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(22) International Filing Date: 4 August 2004 (04.08.2004)

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0318254.0 4 August 2003 (04.08.2003) GB  
0409376.1 27 April 2004 (27.04.2004) GB

(71) Applicants (for all designated States except US): NORTHWICK PARK INSTITUTE FOR MEDICAL RESEARCH [GB/GB]; Harrow Middlesex HA1 3UJ (GB). UNIVERSITY OF ZURICH [CH/CH]; Rämistrasse 71, CH- CH-8006 Zurich (CH).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



WO 2005/013691 A1

(54) Title: USE OF BORANOCARBONATES FOR THE THERAPEUTIC DELIVERY OF CARBON MONOXIDE

(57) Abstract: Boranocarbonates are described for administration to a human or other mammal for delivery of carbon monoxide. The boranocarbonate is a compound or ion adapted to make CO available for physiological effect, and may be administered with a guanylate cyclase stimulant or stabilizer. The physiological effect may be stimulation of neurotransmission, vasodilation or smooth muscle relaxation.